

NOTES ON NEW AND NOTEWORTHY PLANTS. XX

Harold N. Moldenke

NEORAPINIA Moldenke, nom. nov.

Rapinia Montr., Mém. Acad. Lyon 10: 243. 1860 [not Rapinia Lour., Fl. Cochinch. 127. 1790].

NEORAPINIA COLLINA (Montr.) Moldenke, comb. nov.

Rapinia collina Montr., Mém. Acad. Lyon 10: 243. 1860.

AEGIPHILA UMBRACULIFORMIS Moldenke, sp. nov.

Frutex; ramis simplicibus nudis dense puberulis; foliis verticillatis sessilibus membranaceis ad apicem caudicis confertis obovatis acuminatis integris utrinque glabris ad basin attenuatis-subacuminatis subamplexicaulibusque; inflorescentiis terminalibus solitariis erectis capitoideis cymose brachiatis dense multifloris; calyxe campanulato puberulente, margine 5-lobato.

Shrub, 1--1.5 m. tall; stem unbranched, naked, rather densely puberulent; leaves whorled, borne in a dense umbrella-like cluster at the tip of the stem, sessile, membranous, dark-green above, lighter beneath, obovate, 39--42 cm. long, 15--18 cm. wide, acuminate at the apex, attenuate-subacuminate to a subamplexicaul base, entire, glabrous on both surfaces or minutely puberulous along the midrib above; midrib stout, flat above, prominent beneath; secondaries slender, about 12 per side, arcuate-ascending, joined in many slender loops near the margins, flat above, prominent beneath; veinlet reticulation very fine, rather abundant, rather obscure above, the larger portions subprominulous beneath; inflorescence terminal, solitary, erect, head-like, cymosely branched, densely many-flowered; peduncles rather stoutish, about 7 cm. long, densely puberulent like the stems; cyme-branches slender, densely puberulent; pedicels slender, sparsely puberulent, about 5 mm. long; foliaceous bracts absent; bractlets linear, 1.5--3 mm. long, densely puberulent on both surfaces, rather numerous; calyx campanulate, about 3 mm. wide and 2 mm. long, puberulent outside, its rim deeply 5-lobed, the lobes triangular, sharply acute, about 1 mm. long; corolla not seen.

The type of this very distinct species was collected by Harvey Elmer Stork and Ovid Butler Horton (no. 9495) in black humus on low ground in deep forest at Tingo María, at the confluence of the Huallaga and Monzon rivers, Huanuco, Peru, at an altitude of 700 meters, on October 25, 1938, and is deposited in the herbarium of the University of California at Berkeley.

CLERODENDRUM ZEYHERI Moldenke, nom. nov.

Clerodendron violaceum Zeyh., Hort. Schwetzing. 54 ex Link, Enum. Hort. Berol. 2: 127, hyponym. 1321 [not C. violaceum Gürke in Engl., Bot. Jahrb. 28: 303. 1900].

*GMELINA SIAMICA* Moldenke, sp. nov.

Arbor; foliis oppositis; petiolis crassis minute puberulis; foliis coriaceis crassis ovatis ad apicem rotundatis vel subacutis, integris, ad basin rotundatis vel truncatis, supra glabris, subtus sparsissime puberulis vel glabrescentibus; inflorescentiis multibrachiatis multifloris subdensis dense brunneo-puberulis; calyce campanulato purpureo dense puberulenti, margine 4-lobato.

Tree, to 8 m. tall; bark grayish-brown, smooth, sparsely lenticellate, the outer portion papyraceous, the inner part green, about 0.5 cm. thick, brownish when cut; branches and branchlets stout, coarse, tetra-onal, the younger parts minutely puberulous, glabrescent in age; nodes not annulate; principal internodes 1--3.5 cm. long; leaf-scars large, prominent, coarse, corky, broadly crescent-shaped; leaves decussate-opposite; petioles stout, 15--20 mm. long, minutely puberulous, nigrescent in drying; blades coriaceous, heavy, dark-green above, lighter beneath, ovate, 9--15 cm. long, 5.5--10 cm. wide, rounded or subacute at the apex, entire, rounded or truncate at the base, glabrous above, very sparsely puberulous beneath or glabrescent in age; midrib stout, flat above, very prominent beneath; secondaries slender, 5 or 6 per side, ascending, slightly arcuate, flat above, prominent beneath, joined in many small loops near the margins beneath, the uppermost one often confluent at the leaf-apex when the latter is rounded; veinlet reticulation abundant, more or less obscure above, very slightly prominulous beneath; inflorescence about 9.5 cm. long and 3--4 cm. wide, many-branched, many-flowered, rather dense, the peduncles rather stout and about 3 cm. long, densely puberulous with brownish hairs, as are also the rachis, its branches, and the pedicels, all rather stout, coarse, and purple; bractlets apparently caducous; calyx campanulate, purple, about 5 mm. long and wide, densely puberulent outside, its rim deeply 4-lobed; corolla infundibular, pinkish-purple, its tube 10--12 mm. long, about 5 mm. wide at the apex, densely tomentellous above the calyx on the outer surface, the limb about 15 mm. wide, zygomorphic; anthers dark-purple.

The type of this species was collected by Tem Smitinand (no. 1920) at Loei, Phu Krading, Sala Chomphon, in northeastern Thailand, at an altitude of about 1300 meters, on September 13, 1954, and is Royal Forest Department no. 9437, deposited in the H. N. Moldenke Herbarium at Yonkers, New York.

*LIPPPIA VOLKII* Moldenke, sp. nov.

Ramis ut videtur longis gracilibus obtuse tetragonis striato-sulcatis glabris vel in sulcis puberulis; foliis decussatis plerumque confertis conduplicatis; petiolis gracillimis minutissime puberulis; laminis tenuiter chartaceis uniforme griseo-viridibus oblongis vel oblongo-lanceolatis acutis vel subacutis leviter crenatis vel subintegris utrinque glabris et dense resinoso-punctatis, ad basin acutis; inflorescentiis capitatis.

Stems apparently long and slender, obtusely tetragonal, more or less longitudinally striate-sulcate, glabrous or minutely puberulous in the sulcations on the younger parts, with rather

few short side-branches; nodes annulate; principal internodes 3--8 cm. long; leaves decussate-opposite, usually clustered on greatly abbreviated twigs, usually conduplicate-folded in pressing; petioles very slender, 1--2 mm. long, very minutely puberulous; blades thin-chartaceous, uniformly grayish-green on both surfaces, oblong or oblong-lanceolate, 2--5 cm. long, 4--10 mm. wide, acute or subacute at the apex, shallowly crenate or subentire, acute at the base, glabrous and densely resinous-punctate on both surfaces; midrib very slender, impressed above, prominent beneath; secondaries very slender, 5 or 6 per side, arcuate-ascending, not anastomosing at the margins, somewhat impressed above and prominent beneath; veinlet reticulation sparse, inconspicuous on both surfaces; inflorescences capitate, fasciculate in the twig-axils and uppermost leaf-axils, usually 4 or 6 per node, 1--2.7 cm. long, ascending; peduncles very slender, very minutely puberulous and resinous-punctate, 3--15 mm. long; heads oblong, 5--10 mm. long, 5--7 mm. wide, densely many-flowered, compact, not elongating after anthesis; bractlets broadly ovate, about 3 mm. long and 2.5 mm. wide, acuminate at the apex, densely puberulent and resinous-punctate, ciliolate along the margins; corolla-tube 3--3.5 mm. long, densely puberulent outside, the limb about 2 mm. wide, densely puberulent on the outer face.

The type of this species was collected by Otto Heinrich Volk in Southwest Africa in or about 1951 and is deposited in the Staatsherbarium at Munich, Germany.

**MALUS HOPA** Moldenke, nom. nov.

Malus baccata (L.) Borkh. x M. pumila var. niedzwetzkiana (Dieck) Schneid. ex Rehd., Man. Cult. Trees & Shrubs, ed. 2, 393. 1940.

**MALUS RUBELLA** Moldenke, nom. nov.

Malus ioensis (Wood) Britton x M. pumila var. niedzwetzkiana (Dieck) Schneid. ex Rehd., Man. Cult. Trees & Shrubs, ed. 2, 393. 1940.

**VERBENA ANDALGALENSIS** Moldenke, sp. nov.

Herba perennis; caulibus gracilibus multibrachiatis; ramis gracilibus densiuscule patentibus albo-pilosis erectis; foliis decussatis numerosis sessilibus late lineari-oblongis tenuiter chartaceis vel membranaceis utrinque uniforme griseo-viridibus integri vel 2-dentatis utrinque dense strigoso-pubescentibus; inflorescentiis terminalibus dense spicatis, spicis capitatis.

Perennial herb growing from a woody taproot, sending up many stems from its apex; stems slender, often many-branched, the branches wiry, rather densely spreading-pilose with soft white hairs, mostly erect, to 20 cm. tall, apparently much grazed and more stubby; principal internodes 5--10 mm. long; leaves decussate-opposite, numerous, sessile, broadly linear-oblong, thin-chartaceous or membranous, 1.5--3 cm. long, uniformly gray-green on both surfaces, entire or with 2 sharply acute lobe-like teeth

toward the apex, densely strigose-pubescent with white hairs on both surfaces; venation indiscernible; inflorescence terminal, densely spicate, the spikes short and head-like, the floriferous portion 1--2 cm. long and wide; peduncles very slender, 1--2 cm. long, densely spreading-pilose with white hairs; bractlets very short, lanceolate, about 2 mm. long, white-strigose on the back and long-ciliate along the margins, attenuate to a very sharp apex; calyx long-tubular, about 10 mm. long and 1.2 mm. wide, densely white-pilose, its rim 5-toothed; corolla hypocrateriform, bluish-rose, its tube glabrous, projecting 1--2 mm. from the calyx-mouth, its limb 5--6 mm. wide.

The type of this species was collected by Pedro Jorgensen (no. 1613) at Pampa del Arenal, at an altitude of 2700 meters, Andalgalá, Catamarca, Argentina, in March, 1916, and is deposited in the herbarium of the University of California at Berkeley.

*VERBENA CHACENSIS* Moldenke, sp. nov.

Herba; caulibus simplicibus vel 2-brachiatis tetragonis profunde sulcatis dense breviterque pubescentibus, pilis erectis plerumque glanduliferis; foliis decussatis sessilibus ellipticis vel anguste ellipticis acutis argute irregulariterque serratis, ad basin cuneato-acuminatis et amplexicaulibus, supra scabris et obscure breviterque pubescentibus, subtus densiore breviterque pubescentibus, pilis glanduliferis; inflorescentiis spicatis.

Herb, 0.4--0.5 m. tall; stems simple or branching into two at the base, tetragonal, deeply sulcate between the angles, densely short-pubescent with erect mostly glanduliferous hairs, less densely so toward the base; principal internodes 3--5.5 cm. long; leaves decussate-opposite, sessile, elliptic or narrow-elliptic, 6--7 cm. long when mature and 1.5--2.5 cm. wide, the upper ones much narrower and oblong, often recurved, acute at the apex, cuneate-acuminate to the amplexicaul base, sharply and irregularly serrate from above the cuneation to the apex, scabrous and obscurely short-pubescent above, more densely short-pubescent with glanduliferous hairs beneath; midrib slender, impressed above, very prominent beneath; secondaries slender, about 4 per side, ascending, not arcuate, ending in the teeth, impressed above, very prominent beneath; veinlet reticulation very abundant and conspicuous, impressed above and very prominent beneath; inflorescence terminal, spicate, usually with one shorter side-branch, densely many-flowered; peduncles similar to the stems in texture and pubescence, about 9.5 cm. long, with a gall-like globular protuberance above the mid-point; floriferous portion of the spikes 3--8 cm. long, the upper flowers densely overlapping, the lower fruits more distant; rachis densely short-pubescent with brownish glanduliferous hairs like the stems; bractlets lanceolate, about 4 mm. long, equaling or slightly surpassing the calyx, pilose on the back, ciliate-margined; calyx tubular, about 3 mm. long, strigillose, its rim minutely 5-toothed; corolla about 4.5 mm. long, its limb 2 mm. wide.

The type of this species was collected by Teodoro Rojas [Hasler 2459] at Lomal Clavel, latitude S.23°20', in the Gran Chaco,

Paraguay, in November, 1903, and is deposited in the herbarium of the University of California at Berkeley.

*VERBENA SEDULA* Moldenke, sp. nov.

Herba 1 m. alta; caulibus ramisque tetragonis valde sulcatis brunneis glabris; foliis decussatis; petiolis gracilibus glabris vel parce setulosis; laminis ellipticis acutis irregulariter serratis utrinque glabris vel parce setulosis; inflorescentiis terminalibus paniculatis multibrachiatis, floribus spicatis, spicis dense multifloris, floribus contiguis; calyce pilosulo.

Herb, about 1 m. tall; stems and branches tetragonal, rather conspicuously sulcate and ribbed, brownish, glabrous; nodes annulate, often with white setulose hairs; principal internodes 3.5--5.5 cm. long; leaves decussate-opposite; petioles slender, 1.5--2 cm. long on mature leaves, glabrous or with a very few setulose hairs; blades thin-chartaceous, brunnescent in drying, elliptic, 4--8 cm. long, 1--2.7 cm. wide, acute at the apex, rather irregularly serrate from below the middle to the apex, glabrous on both surfaces or with a very few scattered setulose hairs; midrib slender, subimpressed above, prominulous beneath; secondaries very slender, about 6 per side, subimpressed above, prominulous beneath; veinlet reticulation rather abundant but often obscure, sometimes the larger parts prominulous beneath; inflorescence terminal, forming an open panicle about 20 cm. long and 15 cm. wide, many-branched, the small flowers borne in spicate fashion on the branches, the individual spikes to about 14 cm. long and 5 mm. wide, densely many-flowered, the flowers contiguous and partly overlapping; peduncles and inflorescence-branches slender, tetragonal, glabrous or with a few scattered setulose white hairs; bractlets subtending each calyx lanceolate-ovate, about 2 mm. long, acuminate, more or less ciliate-margined toward the base; calyx tubular, about 3 mm. long, sparsely pilosulous, its rim 5-toothed; corolla white, about 4 mm. long, its limb about 3 mm. wide.

The type of this species was collected by Robert I. Bowman (no. 81) at an elevation of 2500 feet on the north slope of the main peak on Indefatigable Island (Santa Cruz), Galapagos Islands, on February 15, 1953, and is deposited in the herbarium of the University of California at Berkeley.

*AMYGDALUS PERSICA* f. *AGANOPERSICA* (Reichenb.) Moldenke, stat. nov.

*Amygdalus persica* var. *aganopersica* Reichenb., Fl. Germ. Exc. 647. 1832.

*AMYGDALUS PERSICA* var. *COMPRESSA* (Loud.) Moldenke, comb. nov.

*Persica vulgaris* var. *compressa* Loud., Arb. Brit. 2: 680, fig. 397. 1838.

*AMYGDALUS PERSICA* f. *SCLEROPERSICA* (Reichenb.) Moldenke, comb. nov.

*Prunus persica* f. *scleropersica* (Reichenb.) Voss in Putlitz &

Meyer, Landlex. 6: 345. 1914.

xPRUNUS MARIANNA Moldenke, nom. nov.

Prunus cerasifera Ehrh. x P. munsoniana Wight & Hedr. or P. angustifolia Marsh. ex Rehd., Man. Cult. Trees & Shrubs, ed. 2, 457. 1940.

xPRUNUS MOTLEYI Moldenke, nom. nov.

Prunus cerasifera Ehrh. x P. salicina Lindl. ex Rehd., Man. Cult. Trees & Shrubs, ed. 2, 457. 1940.

xPRUNUS MOTLEYI var. ATROPURPUREA Moldenke, nom. nov.

Prunus cerasifera var. atropurpurea Jaeg. x P. salicina Lindl. ex Rehd., Man. Cult. Trees & Shrubs, ed. 2, 457. 1940.

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#### BOOK REVIEWS

Harold H. Moldenke

"Practical Mycology: Manual for the identification of fungi", by Sigurd Funder; 146 pp., 49 text figures, 160 line drawings, 1 chart. Stechert-Hafner, Inc., 31 East 10th Street, New York. 1953

This little volume should be on every botanist's library shelf. It contains a simple introduction to the science of mycology, giving an explanation of the chief characters on which the identification of fungi is based, with definitions of terms employed. There is a survey of the classification of fungi. Probably the most interesting part of the book, however, is the extensive series of line drawings depicting the most important genera and species of fungi of particular interest to the general student, to the medical mycologist, and to the plant pathologist. A key to fungi attacking the human body is included.

It will interest the taxonomist to note that Funder includes the slime-molds among the fungi, rather than considering them to represent a separate branch of the thallophytes. What he actually calls them is a "division of sub-phylum" -- a term which, I suppose, might be regarded as equivalent to a Super-class.

One could wish for more books like this one to popularize the lower groups of plants for the student of the phanerogams. There are so many hundreds of good books, of all sizes, which treat the flowering plants in general and of various specific regions and which treat them in all possible degrees of technicality. We need more books like Funder's to explain in simple language and interesting style the complexities of the cryptogams.